

SEVERE LOCAL STORMS, DECEMBER, 1928

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the Annual Report of the Chief of Bureau]

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
Salisbury to Princess Anne, Md.	8					High winds	Poles blown down; telephone service impaired.	Official, U. S. Weather Bureau.
Pearland, Tex. (near)	12	5:15 p. m.	20		\$10,000	Tornado	Buildings damaged; 1 person injured.	Do.
Zavalla, Tex. (near)	12	5:30 p. m.	100	1		do.	Everything in 1-mile path destroyed or damaged; 5 persons injured.	Do.
Center (near) to Tenaha (near), Tex.	13	6 p. m.	50	1	3,000	do.	A number of buildings destroyed; timber lands damaged; 3 persons injured.	Do.
Nobile to Benson, La.	12	6 p. m.	200	1	16,700	do.	Buildings and timber damaged; livestock killed; path 12 miles; a few persons injured.	Do.
Sabine and De Soto Parishes, La.	12					High winds	Timber and other property damaged.	Do.

¹ Includes damage in Sabine and De Soto Parishes, La., by winds not tornadic (item following).

RIVERS AND FLOODS

By R. E. SPENCER

Rains from December 11 to 13 and again, in heavier falls, on December 16 and 17 over the area from Arkansas and eastern Oklahoma southward to Texas and the Gulf of Mexico resulted in moderate floods in the Ouachita and lower Black Rivers of Arkansas, and in the Sulphur and Trinity Rivers of Texas.

No direct losses were reported except in the Sulphur River section of Texas, where the total, largely in bridges, highways, levees, etc., amounted to \$46,000. Property worth \$140,000 was saved in this section through Weather Bureau warnings. On the Ouachita such advantage was taken of the flood warnings that no avoidable loss occurred; though damage done to winter pastures was considerable. The Trinity River rise was forecast accurately and well in advance, with resultant losses negligible and \$7,000 saved in livestock and movable property.

[Dates in December except as otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
MISSISSIPPI DRAINAGE					
Illinois:	<i>Feet</i>			<i>Feet</i>	
Peru, Ill.....	14	(1) 15	3	15.9	Nov. 20.
Henry, Ill.....	10	19	(2) 27	17.1	19.
Havana, Ill.....	14	21	(1) 27	10.6	21–22.
Beardstown, Ill.....	14	23	(2) 10	14.7	26.
St. Francis: St. Francis, Ark.....	17	3	(1) 18.6	14.8	27–28.
Petit Jean: Danville, Ark.....	17	17	29	8.	
Black:	20	18	19	21.0	24.
Black:				20.6	19.
Corning, Ark.....	11	1	12	12.2	4–7.
Black Rock, Ark.....	14	18	26	13.0	21.
Cache: Patterson, Ark.....	9	17	22	16.2	19.
Sulphur:		20	30	9.6	23–25.
Ringo Crossing, Tex.....	20	17	22	29.0	18.
Finley, Tex.....	24	19	26	30.3	21.
Cypress: Jefferson, Tex.....	18	20	26	24.2	21.
Ouachita:					
Arkadelphia, Ark.....	12	17	19	19.7	18.
Camden, Ark.....	30	20	25	34.9	22.
WEST GULF DRAINAGE					
Trinity:					
Dallas, Tex.....	25	17	20	37.6	18.
Trinidad, Tex.....	28	20	28	38.4	24.
Trinity, Elm Fork: Carrollton, Tex.....	7	17	17	7.3	17.

¹ Continued from last month.

² Continued at end of month.

MEAN LAKE LEVELS DURING DECEMBER, 1928

By UNITED STATES LAKE SURVEY

[Detroit, Mich., January 4, 1929]

The following data are reported in the Notice to Mariners of the above date:

Data	Lakes ¹			
	Superior	Michigan and Huron	Erie	Ontario
Mean level during December, 1928:				
Above mean sea level at New York.....	Feet 603.00	Feet 580.63	Feet 571.74	Feet 245.80
Above or below—				
Mean stage of November, 1928.....	–0.39	+0.02	+0.01	+0.13
Mean stage of December, 1927.....	+0.68	+1.85	+0.13	+0.15
Average stage for December, last 10 years.....	+1.12	+1.45	+0.31	+0.68
Highest recorded December stage.....	–0.13	–1.95	–1.79	–1.81
Lowest recorded December stage.....	+2.75	+3.09	+1.35	+2.37
Average departure (since 1860) of the December level from the November level.....	–0.27	–0.22	–0.07	–0.07

¹ Lake St. Clair's level: In December, 1928, 574.98 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, DECEMBER, 1928

By J. B. KINCER

General summary.—During the first decade rains were beneficial in the Pacific Coast States and higher temperatures in the far Northwest were helpful, but much range land in the central Rocky Mountain district was snow-covered, necessitating considerable feeding of livestock. East of the Rocky Mountains the ground was generally bare of snow, except in some north-central districts. The persistently cold weather, with continued soft fields from previous rains, was rather unfavorable for outside operations in parts of the interior and the freezing temperatures in the Southeast killed tender truck as far south as parts of central Florida and did some local damage to citrus. Precipitation was still needed in some south Atlantic and Gulf sections, but elsewhere soil moisture was largely sufficient.

During the second decade frequent rains in many places, heavy in the Mississippi Valley States and parts of the Southwest, caused farm operations to be largely suspended, but elsewhere seasonal work made good advance and was generally up to an average year. Showers